



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/887,789	06/22/2001	Michael P. Whitman	11443/56	7650
110	7590	05/28/2004	EXAMINER	
DANN, DORFMAN, HERRELL & SKILLMAN 1601 MARKET STREET SUITE 2400 PHILADELPHIA, PA 19103-2307			TRAN, LOUIS B	
			ART UNIT	PAPER NUMBER
			3721	

DATE MAILED: 05/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/887,789

Applicant(s)

WHITMAN ET AL.

Examiner

Louis B Tran

Art Unit

3721

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 6-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 6-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>02/27/04, 02/23/04</u> . | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

This action is in response to applicant's amendment, received on 02/17/2004.

#### ***Double Patenting***

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claim 35 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 10/256,659 and 10/256,893. All Applications claim rotatable drive shafts, detachable surgical instruments and steering wires. Claim 35 of the current Application 09/887,789 requires a power console. Power consoles are notoriously well known in the art and it would be obvious to one of ordinary skill to include or omit a power console in the claims.

This is a provisional obviousness-type double patenting rejection.

#### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 3721

4. Claims 1,6-34,36,39-41 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1,32-34, 36, 39-41 contains the trademark/trade name "quick-connect". Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe a simple coupling between two elements and, accordingly, the identification/description is indefinite.

With respect to claim 20, Applicant claims, "without any instrument supported on the distal free end". However, this is indefinite since Applicant's own invention supports a coupling instrument at the distal free end of the shaft.

With respect to claim 15, it is unclear what elements are being referred to a third and fourth connectors since Figure 9A of Applicant's invention only shows two connectors.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. To the extent that it is definite, claims 20-26, 28-31,34 are rejected under 35 U.S.C. 102(b) as being anticipated by Wilk (5,330,486).

With respect to claim 20, Wilk teaches the steps of (a) inserting a hollow shaft having a distal free end and a shaft diameter into the body via a first orifice without any instrument supported on the distal free end, the hollow shaft containing a drive shaft rotatably disposed therein, (b) inserting a surgical instrument into the body via a second orifice, the surgical instrument including a coupling complimentary to and configured to couple with the distal free end of said hollow shaft to connect the drive shaft with the surgical instrument in operable communication and (c) coupling the hollow shaft and the surgical instrument via the coupling after the inserting steps (a) and (b) as seen in Figure 10 described in column 14, lines 15-45.

With respect to claim 21, Wilk teaches wherein the hollow shaft and the surgical instrument are coupled in the coupling step (c) intracorporeally.

With respect to claim 22, Wilk teaches the step of forming a surgical procedure after the coupling step (c) as described in column 14 lines 15-40.

With respect to claim 23 and 24, Wilk teaches wherein the surgical procedure includes a tissue stapling and cutting procedure.

With respect to claim 25, Wilk teaches wherein the surgical procedure includes an anastomosis procedure.

With respect to claim 26, Wilk teaches wherein the surgical instrument includes at least one of a surgical stapler instrument, a surgical stapler and cutter instrument and an anastomosis instrument.

In reference to claim 28, Wilk teaches wherein the first orifice includes at least one of a natural orifice, an incision, and a cannula.

In reference to claim 29, Wilk teaches wherein the second orifice includes at least one of a natural orifice, an incision, and a cannula.

In reference to claim 30, Wilk teaches wherein each of the first orifice and the second orifice includes at least one of a natural orifice, an incision and a cannula.

With respect to claim 31, Wilk teaches wherein the first orifice is different from the second orifice as seen in Figure 10.

With respect to claim 34, Wilk teaches a quick connect fitting 218 having a fitting diameter substantially equal to the hollow shaft diameter.

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. To the extent that it is definite, claims 1, 6-8, 10-19, 33, 39-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adams et al. (6,119,913) in view Wilk (5,330,486).

With respect to claim 1, Adams et al. teaches the use of a surgical device comprising a hollow shaft having a distal free end and a shaft diameter at least a first rotatable drive shaft 724' disposed in the hollow shaft and extending longitudinally through the hollow shaft to the distal end of the hollow shaft, a first connector 724 attached to the first rotatable drive shaft (seen in Figure 15), a first surgical instrument 700 configured to be coupled with the distal free end of the hollow shaft.

Adams et al. further shows a quick connect fitting 717 coupling the first instrument with the first connector.

Adams et al. does not show wherein the hollow shaft is configured to be inserted into a body via a first orifice and the first surgical instrument is configured to be inserted into the body via a second orifice and wherein the quick-connect fitting is configured to couple with the first surgical instrument with the distal free end after the hollow shaft is inserted into the body via the first orifice and after the first surgical instrument is inserted into the body via the second orifice.

However, Wilk teaches the hollow shaft is configured to be inserted into a body via a first orifice and the first surgical instrument is configured to be inserted into the body via a second orifice and wherein the quick-connect fitting is configured to couple with the first surgical instrument with the distal free end after the hollow shaft is inserted into the body via the first orifice and after the first surgical instrument is inserted into the

body via the second orifice for the purpose of completing an anastomosis procedure as commonly practiced and described in column 1, lines 42-62.

Therefore, it would have been obvious to one having ordinary skill in the art to practice the device of Adams et al. in the manner taught by Wilk in order to effectively complete an anastomosis procedure.

With respect to claim 6, the modified device of Adams et al. shows wherein the first surgical instrument is a stapler as in Figure 15 of Adams et al.

With respect to claim 7, the modified device of Adams et al. shows wherein the first surgical instrument includes a surgical stapler and cutter instruments as in Figure 15 of Adams et al.

With respect to claim 8, the modified device of Adams et al. shows wherein the first surgical instrument includes an anastomosis instrument as in Figure 15.

With respect to claim 10, Adams et al. teaches the use of wherein the surgical instrument includes at least one movable element 720, a shaft including at least one rotatable drive shaft 724' configured to effect movement of the at least one movable element 720.

With respect to claim 11, Adams et al. also teaches a device wherein the first surgical instrument includes a second connector (described in column 10 line 22) for detachable coupling with the first connector on the first rotatable drive shaft and wherein the first connector and the second connector are configured to detachably couple the at least one movable element with the first rotatable drive shaft.



coupling and wherein a first coupling (tip of 717) and second coupling 719 are configured to couple the at least one movable element 720 with the rotatable drive shaft 724' as described in column 10, line 12 for the purpose of connecting two ends.

With respect to claim 12, Adams et al. also teaches a device further comprising an electro mechanical driver device configured to drive at least one rotatable drive shaft.

With respect to claim 13, Adams et al. teaches wherein the electromechanical driver device includes a motor system configured to drive the at least one drive shaft.

With respect to claim 14, Adams et al teaches a second rotatable drive shaft in the hollow shaft and wherein the first surgical instrument includes a first movable element 720 and a second movable element 722, and wherein the first rotatable drive shaft 724' is configured to effect movement of the first movable element 720 and the second rotatable drive shaft 722' is configured to effect movement of the second movable element 722 seen in Figure 5.

With respect to claim 15, Adams et al. teaches wherein the second rotatable drive shaft is attached to a third connector and the first surgical instrument includes a fourth connector 719 for detachable coupling with the third connector of the second rotatable drive shaft, the third connector 717 and the fourth connector 719 being configured to couple the second moveable element with the second rotatable drive shaft.

With respect to claim 16, Adams et al. teaches a device further comprising an electromechanical driver device configured to drive the first rotatable drive shaft and the second rotatable drive shaft as seen in Figure 1.

With respect to claim 17, Adams et al. teaches wherein the electro mechanical driver device includes a motor system configured to drive the first rotatable drive shaft and the second rotatable drive shaft.

With respect to claim 18, Adams et al. teaches wherein the motor system includes a first motor configured to drive the first rotatable drive shaft and a second motor configured to drive the second rotatable drive shaft.

With respect to claim 19, Adams et al. teaches wherein the hollow shaft includes a steering device 16 configured to steer the distal end of the hollow shaft described in column 6, lines 35-37.

With respect to claim 33, Adams et al. shows a quick connect fitting diameter 717 substantially equal to the hollow shaft diameter as seen in Figure 15.

With respect to claim 39, 40, and 41, Adams et al. shows quick connect attachable to one of the first surgical instruments and the hollow shaft.

9. Claims 9 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adams et al. (6,119,913) in view of Wilk (5,330,486) in further view of Wilk (5,314,436).

With respect to claim 9 and 27, the modified device of Adams et al. discloses the invention substantially as claimed but does not show a wherein the hollow shaft and the first surgical instrument coupled to the hollow shaft are configured to be withdrawn from the body via the first orifice.

However, Wilk (436) teaches wherein the hollow shaft and the first surgical instrument coupled to the hollow shaft are configured to be withdrawn from the body via

the first orifice as described in column 4, lines 26-40 for the purpose of ease of removal as in column 1, lines 46-57.

Therefore, it would have been obvious to one having ordinary skill in the art to provide a modified method of removal in order to increase convenience.

10. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Adams et al. (6,119,913) in view of Wilk (5,330,486) in further view of Mastri et al. (5,782,396).

Wilk discloses the invention substantially as claimed including a surgical device with a distal end and hollow shaft and drive shaft but does not explicitly show a second surgical instrument interchangeable with said first surgical instrument, said second surgical instrument configured for selective attachment with the quick connect fitting to connect the hollow shaft and drive shaft to operably couple the second surgical instrument to said drive shaft.

However, Mastri et al. teaches the use of a second surgical instrument interchangeable with said first surgical instrument, said second surgical instrument configured for selective attachment with the quick connect fitting to connect the hollow shaft 14 and drive shaft 64 to operably couple the second surgical instrument to said drive shaft for convenient removal and changeability of parts as in column 5, lines 1-25.

Therefore, it would have been obvious to one having ordinary skill in the art to provide interchangeable feature as is commonly practiced in the art in order to provide convenient removal and changeability.

11. Claims 35-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adams et al. (6,119,913) in view of Culp et al. (6,017,354).

Adams et al. discloses the claimed invention including a flexible hollow shaft, a first surgical instrument, a rotatable drive shaft, steering cable, the shaft having a substantially uniform shaft diameter but does not specifically show a power console.

However, power console's are notoriously well known in the art as shown in Culp et al. for the purpose of providing power to driven surgical instruments as in the Abstract.

Therefore, it would have been obvious to one having ordinary skill in the art to provide a power console to drive a surgical instrument.

With respect to claim 36, Adams et al. shows a quick connect fitting 717 to detach the instrument from the shaft.

With respect to claim 37, Culp et al. provides a teaching of attaching second surgical instruments being interchangeable with a shaft.

12. Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Adams et al. (6,119,913) in view of Culp et al. (6,017,354) in further view of Mastri et al. (5,782,396).

The modified device of Adams et al. discloses the invention substantially as claimed but does not show the first instrument comprising one of a stapler, cutter and a second instrument comprising a clamping device; however, Mastri et al. shows a stapler cutter head and clamping head seen in Figure 1 for the purpose of various operating conditions as in the Abstract.

Therefore, it would have been obvious to one having ordinary skill in the art to select a stapler/cutter and clamping device as a first and second instrument in order to carry out specific operations.

### ***Conclusion***

13. Applicant's remarks have been fully considered but are deemed moot in view of the new grounds of rejection.

In response to Applicant's arguments, the functional recitation requiring specific surgical procedures in the apparatus claims has not been given patentable weight because it is narrative in form. In order to be given patentable weight, a functional recitation must be expressed as a "means" for performing the specified action, as set forth in 35 USC § 112, 6<sup>th</sup> paragraph, and must be supported by recitation in the claim of sufficient structure to warrant the presence of the functional language. *In re Fuller*, 1929 C.D. 172; 388 O.G. 279.

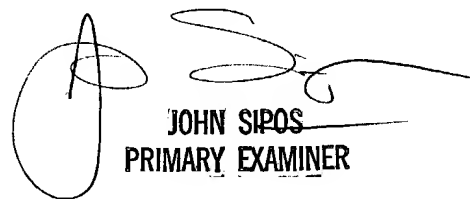
Applicant has relied upon a "quick-connect" feature for patentability but this term has been rendered indefinite since it is a Trademark. Claims are interpreted with the broadest reasonable interpretation.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Louis B Tran whose telephone number is 703-305-0611. The examiner can normally be reached on 8AM-6PM Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi I Rada can be reached on 703-308-2187. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3721

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



JOHN SIPOS  
PRIMARY EXAMINER

lbt